

## REMARKS

### Present Status of Patent Application

The Office Action rejected claims 33, 46, 55, 72, and 73 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,343,493, to Karimullah. The Office Action also rejected claims 33, 46, 55, 72, and 73 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,825,457, to Lebowitz. The Office Action rejected claims 34-45, 47-54, and 56-71 under 35 U.S.C. §103(a) as being unpatentably over Lebowitz, in view of U.S. Patent 6,067,030, to Burnett.

In reviewing the claims of this application, the undersigned noted several typographical errors, and has corrected those by the amendments made herein. However, no substantive changes have been made to the claims, and the amendments were not made for purposes of defining over the cited references or otherwise for purposes of patentability. Nor has any new matter has been introduced to the application by virtue of the amendments made herein.

For the reasons set forth herein, Applicant respectfully requests reconsideration and withdrawal of these rejections.

### Summary of Present Application

The present application is generally directed to a system for communicating information to a predetermined location. In accordance with one aspect of the invention, the system includes a transmitter disposed at a first location and configured to transmit a signal containing an instruction code to a transceiver. The instruction code uniquely identifies an instruction to be carried out. Preferably, the transmitter transmits a relatively low-power radio-frequency electromagnetic signal. The system further includes a transceiver disposed remotely from the transmitter (but within range of the transmitted signal) and is configured to receive the transmitted signal. The

transceiver circuit includes a line interface circuit configured to interface with a telephone line that is part of the public-switched telephone network (PSTN) and initiate a phone call over the telephone line. In this regard, the transceiver further includes a controller configured to control both the reception of the transmitted signal and to control the communication of information over the telephone line. Finally, the system includes a central station remotely located from said transceiver but being in communication with said transceiver via the PSTN. The central station further includes a decoder configured to decode the instruction code.

As will be appreciated, the system summarized above provides an extremely robust and flexible platform for providing general purpose communications to a central location. In this regard, the term "general purpose" may also be referred to as an "open ended" platform that may be readily adapted for a wide variety of uses. The instruction code is a relatively small data value that may be decoded to define a wide variety of functions. For example, an instruction code a single byte (eight bits) in size may define up to two hundred fifty six different functions or instructions. Similarly, an instruction code two bytes in size may define over sixty-five thousand ( $2^{16}$ ) functions or instructions.

In operation, the transmitter transmits the instruction code, perhaps along with other information, to a transceiver located remotely, but generally nearby. The transceiver, which will preferably be integrated into a pay-type public telephone (but which can be integrated into virtually any telephone or other device having access to the PSTN), receives the transmitted information including the instruction code, and communicates this information to a predetermined location over the PSTN. In this regard, the transceiver is configured with a controller or other appropriate component to place a call to a predetermined phone number. Once the connection is established, the instruction code may be communicated (as by modem) to the predetermined

location. The predetermined location (which may be a central dispatch location) then decodes the instruction code to identify the function or instruction that corresponds to the code, and further initiates an appropriate response.

## Discussion of Rejections

### ***Fundamental Basis for Withdrawing Rejections***

Before addressing the individual rejections set forth by the Office Action, Applicant will first note some fundamental differences between the claimed invention and the cited patents. In this regard, the Office Action has rejected independent claims 33, 46, 55, 72, and 73 as being anticipated by both U.S. Patent 5,343,493, to Karimullah, and U.S. Patent 4,825,457, to Lebowitz. Neither of these references, however, anticipate Applicant's invention as defined in the independent claims.

With regard to the Karimullah patent, the system disclosed therein is directed to a personal assistance system and method for use with a cellular communication system. First, Applicant notes a fundamental distinction between the low-power RF transmitter disclosed in the present application, and recited in the various independent claims, from that of a cellular transmitter. As is known, cellular transmitters typically transmit several miles. In contrast, the low-power transmitter of the present invention transmits much shorter distances. Indeed, and as is specifically disclosed in the specification (e.g., page 12, lines 6-15), the low-power transmitter of the present invention operates at such a low power that a user would have to be in close proximity (e.g., several feet) to the receiver in order to use the transmitter (specification, page 12, lines 8-9).

The "low-power" limitation is embodied in various independent claims of the present application, and cannot be ignored by the Patent Office. In addition, the Patent Office cannot assign its own

definition to low-power, which is repugnant to the clear teachings of the present specification.

Accordingly, the cellular transmissions of the Karimullah patent cannot be equated to the low-power RF transmissions of the present invention. For at least this reason, the Karimullah patent does not anticipate the presently-pending claims. Other fundamental distinctions exist between the various embodiments of the present invention and the Karimullah patent, and these other various distinctions will be discussed in connection with the specific claim rejections below.

With regard to the Lebowitz patent, like the Karimullah patent, the Lebowitz patent is directed to a cellular network data transmission system. As with the Karimullah patent, the cellular network disclosed in Lebowitz does not anticipate the low-power RF transmitters of the presently-claimed invention. Accordingly, the Lebowitz patent does not anticipate the presently-pending claims.

Each claim or claim grouping will now be addressed individually.

### ***Independent Claim 33***

The Office Action rejected claim 33 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,343,493, to Karimullah. The Office Action also rejected claim 33 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,825,457, to Lebowitz. For the reasons set forth below, Applicant respectfully traverses this rejection.

Independent claim 33 recites:

33. A system for communicating information to a predetermined location, the system comprising:  
a transmitter configured to wirelessly transmit a *low-power signal* comprising the information;  
*a transceiver, located* remote from, but *in close proximity* to the transmitter, the transceiver comprising:  
*a line interface circuit configured to interface with a telephone line*, wherein the telephone line is part of the public service telephone network (PTSN); and

*a controller configured to receive the signal and communicate the information over the telephone line; and*  
a central location, located remotely from the transceiver, configured to communicate with the transceiver via the telephone line and receive the information.

(*Emphasis added.*) Applicant respectfully submits that claim 33 patently defines over the cited art for at least the reason that the cited prior art fails to disclose or otherwise teach the features emphasized above.

The Office Action rejected claim 33 as being anticipated by Karimullah. In forming this rejection, the Office Action stated that the transmitter 20 of Karimullah anticipated the “low-power” transmitter of claim 33. Applicant respectfully traverses this rejection. As summarized above, the specification of the present application makes clear that the “low-power” limitation of the transmitter of the present application is such that the transmitting distance of the transmitter is on the order of several feet (see specification, page 12, lines 8-9). The Office Action may not properly disregard this limitation or teaching of the specification. Specifically, the claim language “low-power” must be considered, and must be interpreted consistent with the teachings of the specification.

While Applicant recognizes that limitations of the specification are not read into the claims, the specification must be considered when construing limitations that are present within the claims. In this regard, the limitation “low-power” is clearly embodied in claim 33. The Applicant realizes that, if the specification were silent as to this term, the Office Action would have some liberty in giving a broader construction to this claim element. However, in the present situation, the specification is not silent as to the meaning of this term. Instead, the specification has clearly stated that the low-power transmitter of the present application refers to a transmitter that is configured to transmit RF signals a relatively short distance (e.g., on the order of feet, as

opposed to miles). The Office Action is certainly not at liberty to give a claim construction to this term that is repugnant to the teachings of the specification. In applying the cellular transmitter of the Karimullah patent to the transmitter of claim 33, this is precisely what the Office Action has done.

Furthermore, claim 33 has defined "a transceiver, located... in close proximity to the transmitter." Again, with reference to the specification, the term "in close proximity" must be construed to be in the order of several feet (e.g., to say 30-50 feet). The Karimullah patent is completely devoid of any such proximity disclosure with respect to the grid receiver module 80 and the cellular transmitter 20. For at least this reason, claim 33 patently defines over the Karimullah patent.

Close Proximity

As a separate and independent basis for the patentability of claim 33 over the Karimullah patent, claim 33 defines "a line interface circuit configured to interface with a telephone line."

Claim 33 further defines "a controller configured to receive the signal and communicate the information over the telephone line." The Office Action has not even alleged these teachings to be present within the Karimullah patent. In this regard, paragraph 2 of the Office Action is wholly devoid of any reference to such a teaching anywhere within the Karimullah patent. Not only do these elements further define claim 33 over the cited Karimullah patent, but the lack of any reference to these features within the Office Action is a failure on the part of the Office Action to establish a prima facie rejection. Accordingly, if an ensuing Office Action is issued that provides a different rejection based upon the Karimullah patent, or any other patent for that matter, any such ensuing Office Action must be made non-final. For at least this additional reason, claim 33 patently defines over the Karimullah patent and the rejection based upon the Karimullah patent should be withdrawn.

Claim 33

The Office Action also rejected claim 33 based upon the Lebowitz patent. Unfortunately, the rejection set forth in paragraph 3 of the Office Action is even more scant than the rejection set forth in paragraph 2. In this regard, the Office Action has cited almost no teachings within the Lebowitz patent to provide any guidance for understanding how the Lebowitz patent anticipates claim 33. More specifically, the Office Action has not cited to teachings within Lebowitz that disclose a low-power transmitter, a transceiver located in close proximity to the transmitter, a line interface circuit, or a controller, as required by claim 33 of the present application. Instead, the Office Action merely states that "Lebowitz teaches a cellular network data transmission system comprising of sensing a condition from a burglar alarm, fire detector, and so forth wherein a remote signal can be sent to a central monitoring station for further analysis." This is a gross overstatement of the present invention, as defined in claim 33. Accordingly, this rejection should be withdrawn.

As previously mentioned, claim 33 defines a low-power transmitter, and a transceiver located in close proximity to the transmitter. Simply stated, there is no such disclosure or teaching within the Lebowitz patent for anticipating or disclosing these elements, and therefore claim 33 patently defines over Lebowitz for at least this reason. In addition, claim 33 defines a line interface circuit configured to interface with a telephone line. There is no teaching, disclosure, or suggestion within the Lebowitz patent of such a claimed element. For at least this additional reason, the rejection of claim 33 should be withdrawn. Furthermore, claim 33 defines a controller configured to receive the signal and communicate the information over the telephone line. Again, Lebowitz is completely devoid of any such disclosure or teaching, and therefore cannot properly anticipate claim 33.

For at least the foregoing reasons, claim 33 patently defines over the Lebowitz patent.

### ***Dependent Claims 34- 45***

Dependent claims 34-45 each depend from independent claim 33, and therefore patently define over the cited art for at least the reasons set out above in connection with claim 33.

As a separate and independent basis for the patentability of claims 34-45, the Office Action failed to articulate an legally-satisfactory motivation to combine the Lebowitz and Burnett patents. In this regard, Applicant refers to the recent Federal Circuit decision of *In re Sang-Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Since this case was decided on January 18, 2002, after the issuance of the presently-outstanding Office Action, the Office Action could not have consider its holding when forming the rejections. For the Examiner's convenience, the undersigned has attached a copy of this opinion hereto at Tab B. As clearly articulated in this opinion, general conclusions of obviousness will not be upheld, without clear evidentiary facts to support them. In this regard, Office Action rejections "cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies." (Tab B, page 7). The *Sang-Su Lee* opinion further states that Office Actions "must make findings of facts, and present [their] reasoning in sufficient detail that [a] court may conduct meaningful review of the agency action." (Tab B, page 7).

It is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art that the claimed invention would have been obvious. *W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc.*, 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

"The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ..." Both the suggestion and the expectation of success must be founded in



the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention."

(*Emphasis added.*) In re Dow Chemical Company, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicant notes that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest both the combination of elements and the structure resulting from the combination. Stiftung v. Renishaw PLC, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to create a system and method for communicating in a point to multi-point digital subscriber line (DSL) network as claimed by the Applicant.

"Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). "Even when the level of skill in the art is high, the [Office Action] must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the [Office Action] must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."

In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

Motivation { "A showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding.'" Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed.Cir.2000)) (quoting

C.R. Bard, Inc., v. M3 Systems, Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed.Cir.1998)); The Federal Circuit has made it clear “that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”; In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir.1999). Thus, there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant.” In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed.Cir.1998).

In the present application, the Office Action has clearly failed to satisfy this evidentiary standard, which the Federal Circuit, in In re Sang-Su Lee (Tab B), held that the Administrative Procedures Act mandates. For example, in rejecting claims 34-45, the Office Action stated only:

... Therefore, it would have been obvious ... to incorporate the teaching of Burnett into that of Lebowitz thus making it possible to transmit an alarm signal via the internet to include pertinent information about the originating address.

This is the total of the argument and reasoning set forth by the Office Action in reaching the conclusion that one would have been led to combine the divergent teachings of Lebowitz and Burnett. Applicant respectfully submits that this falls far short of the legal requirement articulated by the Federal Circuit in In re Sung-Su Lee. For this reason alone, the rejections of the Office Action should be withdrawn. In addition, Applicant respectfully submits that, even combined, Lebowitz and Burnett fail to disclose all the elements of Applicants claims.

Moreover, the Office Action states that the combination would have been obvious “to ... make it possible to transmit ... via the *internet*...” However, most of Applicant’s are directed to the communication of information over a phone line of the PSTN, and NOT IP communications over the Internet. Clearly, the Office Action has misunderstood and misconstrued the claimed

Internet

invention, and the rejections should be withdrawn.

For the foregoing reasons, the rejections of dependent claims 33-45 should be withdrawn, and these claims allowed.

***Independent Claim 46***

The Office Action rejected claim 46 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,343,493, to Karimullah. The Office Action also rejected claim 46 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,825,457, to Lebowitz. For the reasons set forth below, Applicant respectfully traverses this rejection.

Independent claim 46 recites:

46. A method for communicating information to a predetermined location, the method comprising:  
wirelessly transmitting an information signal from a transmitter to a remote transceiver, ***wherein the information signal is a low-power signal;***  
receiving the information signal by remote transceiver;  
***placing a telephone call from circuitry coupled to the transceiver to a central location via a phone line*** which comprises part of a public switched telephone network;  
communicating at least a portion of the information signal from the transceiver to the central location; and  
***decoding at least a portion of the information signal by the central location.***

(*Emphasis added.*) Applicant respectfully submits that claim 46 patently defines over the cited art for at least the reason that the cited prior art fails to disclose or otherwise teach the features emphasized above.

The method of independent claim 46 calls for the transmission of an information signal “wherein the information signal is a low-power signal.” As discussed above in connection with independent claim 33, this low-power signal does not equate to a cellular transmission, which is a much higher power signal transmission. Accordingly, neither the cellular communication system

of Karimullah nor the cellular network data transmission system of Lebowitz can properly anticipate the method of independent claim 46. Rather than repeat the arguments that have already been set forth here and above, Applicant hereby repeat and re-alleges the argument set forth above in connection with independent claim 33, with respect to the “low-power” claim limitation. For at least this reason, the rejection of independent claim 46 is misplaced and should be withdrawn.

In addition, independent claim 46 calls for “placing a telephone call from circuitry coupled to the transceiver to a central location via a phone line.” Simply stated, the Karimullah patent and Lebowitz patent neither teach or disclose this element. Significantly, the Office Action has not even alleged that this element is taught or disclosed within either the Karimullah patent or Lebowitz patent, as no reference to any teaching within these patents has been set forth in either paragraphs 2 or 3 of the Office Action. For at least this additional reason, the rejection of claim 46 should be withdrawn.

Further still, independent claim 46 calls for the “decoding at least a portion of the information signal by the central location.” Significantly, the Office Action has failed to point to any particular teaching or location within the either the Karimullah or Lebowitz patents that allegedly discloses or teaches this claim element. For at least this additional reason, the rejection of claim 46 should be withdrawn.

#### ***Dependent Claims 47-54***

Dependent claims 47-54 each depend from independent claim 46, and therefore patentably define over the cited art for at least the reasons set out above in connection with claim 46.

As a separate and independent basis for the patentability of claims 47-54, the Office

Action failed to articulate an legally-satisfactory motivation to combine the Lebowitz and Burnett patents. In this regard, Applicant refers to the recent Federal Circuit decision of In re Sang-Su Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Since this case was decided on January 18, 2002, ***after the issuance of the presently-outstanding Office Action***, the Office Action could not have consider its holding when forming the rejections. As clearly articulated in this opinion (Tab B), general conclusions of obviousness will not be upheld, without clear evidentiary facts to support them. In this regard, Office Action rejections "cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies." (Tab B, page 7). The Sang-Su Lee opinion further states that Office Actions "must make findings of facts, and present [their] reasoning in sufficient detail that [a] court may conduct meaningful review of the agency action." (Tab B, page 7).

It is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art that the claimed invention would have been obvious. W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc., 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

"The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ..." Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention."

(*Emphasis added.*) In re Dow Chemical Company, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicant notes that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also

requires the prior art to suggest both the combination of elements and the structure resulting from the combination. Stiftung v. Renishaw PLC, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to create a system and method for communicating in a point to multi-point digital subscriber line (DSL) network as claimed by the Applicant.

"Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). "Even when the level of skill in the art is high, the [Office Action] must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the [Office Action] must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious." In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

"A showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding.'" Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed.Cir.2000)) (quoting C.R. Bard, Inc., v. M3 Systems, Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed.Cir.1998)); The Federal Circuit has made it clear "that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir.1999). Thus, there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was

made by the applicant.” In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed.Cir.1998).

In the present application, the Office Action has clearly failed to satisfy this evidentiary standard, which the Federal Circuit, in In re Sang-Su Lee (Tab B), held that the Administrative Procedures Act mandates. For example, in rejecting claims 46-54, the Office Action stated only:

... Therefore, it would have been obvious ... to incorporate the teaching of Burnett into that of Lebowitz thus making it possible to transmit an alarm signal via the internet to include pertinent information about the originating address.

This is the total of the argument and reasoning set forth by the Office Action in reaching the conclusion that one would have been led to combine the divergent teachings of Lebowitz and Burnett. Applicant respectfully submits that this falls far short of the legal requirement articulated by the Federal Circuit in In re Sung-Su Lee. For this reason alone, the rejections of the Office Action should be withdrawn. In addition, Applicant respectfully submits that, even combined, Lebowitz and Burnett fail to disclose all the elements of Applicants claims.

Moreover, the Office Action states that the combination would have been obvious “to ... make it possible to transmit ... via the *internet*...” However, most of Applicant’s are directed to the communication of information over a phone line of the PSTN, and NOT IP communications over the Internet. Clearly, the Office Action has misunderstood and misconstrued the claimed invention, and the rejections should be withdrawn.

For the foregoing reasons, the rejections of dependent claims 46-54 should be withdrawn, and these claims allowed.

***Independent Claim 55***

The Office Action rejected claim 55 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,343,493, to Karimullah. The Office Action also rejected claim 55 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,825,457, to Lebowitz. For the reasons set forth below, Applicant respectfully traverses this rejection.

Independent claim 55 recites:

55. A system for communicating information to a central location, the system comprising:

***means for wirelessly transmitting a low-power signal*** comprising the information;

means for receiving the low-power signal, the means for receiving being remote but ***within close proximity to the wireless transmitting means***;

***means for telephonically transmitting the information to the central location*** via a public service telephone network; and

means for receiving the information at the central location.

(*Emphasis added.*) Applicant respectfully submits that claim 55 patently defines over the cited art for at least the reason that the cited prior art fails to disclose or otherwise teach the features emphasized above.

First, Applicant notes that the emphasized elements are set forth in means plus function format. Pursuant to 35 U.S.C. § 112(6), a claim element recited in means-plus-function format “shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112, ¶ 6. The Federal Circuit has clearly endorsed this statutory mandate by holding that claims interpreted under 35 U.S.C. § 112, paragraph 6, are limited to the corresponding structure disclosed in the specification and its equivalents. Kahn v. General Motors Corp. 135 F.3d 1472, 45 U.S.P.Q.2d 1608 (Fed. Cir. 1998).

There should be no question but that the elements emphasized in claim 55 are to be construed pursuant to 35 U.S.C. § 112, paragraph 6. In Greenberg v. Ethicon Endo-Surgical Inc.,



91 F.3d 1580, 39 U.S.P.Q. 2d 1783 (Fed. Cir. 1996), the Federal Circuit stated that the use of “means for” language generally invokes 112(6). Indeed, only if means plus function claim elements recite sufficient structure to carry out the function are that taken out of the gambit of 35 U.S.C. § 112, paragraph 6. Cole v. Kimberly-Clark Corp., 102 F.3d 524, 41 U.S.P.Q.2d 1001 (Fed. Cir. 1996).

Indeed, the Federal Circuit reiterated in Sage Products, Inc. v. Devon Industries, Inc., 126 F.3d 1420, 44 U.S.P.Q.2d 1103 (Fed. Cir. 1998) that “the use of the word ‘means,’ which is part of the classic template for functional claim elements, gives rise to ‘a presumption that the inventor used the term advisedly to invoke the statutory mandates for means-plus-function clauses.” Ultimately, the Court in Sage construed the relevant claim elements under 35 U.S.C. § 112(6), because ‘means’ were recited, and the claim elements did not “explicitly recite[s] the structure, material, or acts needed to perform the [recited] functions. Sage at p. 1428. The Federal Circuit further acknowledged this presumption in Al-Site Corp. v. VSI International, Inc., 174 F.3d 1308, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999).

Thus, claim elements expressed in “means” plus function format are construed is determined in accordance with 35 U.S.C. § 112, paragraph 6, as set forth above, and as further described in In re Donaldson 16 F.3d 1189, 29 U.S.P.Q.2d 1845 (Fed. Cir. 1994)(*en banc*). Therefore, the various “means” elements must be construed in accordance with the structure set forth in the present specification. In this regard, Applicant notes that, in In re Donaldson, The Board of Patent Appeals and Interferences advanced the legal proposition that “limitations appearing in the specification are *not* to be read into the claims of an application.” In re Donaldson at 1848. This argument, however, was rejected by the Federal Circuit, which held, as a matter of law, that “one construing means-plus-function language in a claim must look to the specification and interpret that

language in light of the corresponding structure ... described therein, and equivalents thereof. In re Donaldson at 1848. Furthermore, the holding in In re Donaldson does not conflict with the principle that claims are to be given their broadest reasonable interpretation during prosecution. In re Donaldson at 1850.

The corresponding structure disclosed in the present specification that corresponds to the various means elements is distinct from that disclosed in the cited patents. For at least this additional reason, Applicant submits that the rejection of claim 55 should be withdrawn.

In addition to the foregoing reasons, independent claim 55 calls for “means for wirelessly transmitting a low-power signal.” Since this means plus function claim element must be construed in accordance with the structure, material, and acts specifically disclosed in the present application, the disclosure of the present application clearly excludes a cellular system from anticipating this claim element. The fact that the Office Action has rejected claim 55 on an identical basis with claims 33 and 46 reflects a fundamental error of law, insofar as the Office Action has accorded means plus function claim elements an identical interpretation with non-means plus function claim elements. For at least this reason, the rejection of claim 55 should be withdrawn. Furthermore, claim 55 calls for “means for telephonically transmitting the information to a central location.” This “means” includes line-interface circuitry that couples the transceiver with a telephone line. Simply stated, neither the Karimullah or Lebowitz patents disclose such circuitry, and therefore claim 55 patently defines over these references for at least this additional reason.

### ***Dependent Claims 56- 65***

Dependent claims 56-65 each depend from independent claim 55, and therefore patently define over the cited art for at least the reasons set out above in connection with claim 55.

As a separate and independent basis for the patentability of claims 56-65, the Office Action failed to articulate an legally-satisfactory motivation to combine the Lebowitz and Burnett patents. In this regard, Applicant refers to the recent Federal Circuit decision of *In re Sang-Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Since this case was decided on January 18, 2002, ***after the issuance of the presently-outstanding Office Action***, the Office Action could not have consider its holding when forming the rejections. As clearly articulated in this opinion (Tab B), general conclusions of obviousness will not be upheld, without clear evidentiary facts to support them. In this regard, Office Action rejections "cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies." (Tab B, page 7). The *Sang-Su Lee* opinion further states that Office Actions "must make findings of facts, and present [their] reasoning in sufficient detail that [a] court may conduct meaningful review of the agency action." (Tab B, page 7).

It is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art that the claimed invention would have been obvious. *W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc.*, 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

"The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ..." Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from

the claimed invention."

(*Emphasis added.*) *In re Dow Chemical Company*, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicant notes that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest both the combination of elements and the structure resulting from the combination. *Stiftung v. Renishaw PLC*, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to create a system and method for communicating in a point to multi-point digital subscriber line (DSL) network as claimed by the Applicant.

"Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). "Even when the level of skill in the art is high, the [Office Action] must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the [Office Action] must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious." *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

"A showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding.'" *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed.Cir.2000)) (*quoting C.R. Bard, Inc., v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed.Cir.1998)); The Federal Circuit has made it clear "that the best defense against the subtle but

powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir.1999). Thus, there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant." In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed.Cir.1998).

In the present application, the Office Action has clearly failed to satisfy this evidentiary standard, which the Federal Circuit, in In re Sang-Su Lee (Tab B), held that the Administrative Procedures Act mandates. For example, in rejecting claims 56-65, the Office Action stated only:

... Therefore, it would have been obvious ... to incorporate the teaching of Burnett into that of Lebowitz thus making it possible to transmit an alarm signal via the internet to include pertinent information about the originating address.

This is the total of the argument and reasoning set forth by the Office Action in reaching the conclusion that one would have been led to combine the divergent teachings of Lebowitz and Burnett. Applicant respectfully submits that this falls far short of the legal requirement articulated by the Federal Circuit in In re Sung-Su Lee. For this reason alone, the rejections of the Office Action should be withdrawn. In addition, Applicant respectfully submits that, even combined, Lebowitz and Burnett fail to disclose all the elements of Applicants claims.

Moreover, the Office Action states that the combination would have been obvious "to ... make it possible to transmit ... via the *internet*..." However, most of Applicant's are directed to the communication of information over a phone line of the PSTN, and NOT IP communications over the Internet. Clearly, the Office Action has misunderstood and misconstrued the claimed invention, and the rejections should be withdrawn.

For the foregoing reasons, the rejections of dependent claims 56-65 should be withdrawn, and these claims allowed.

***Independent Claim 66***

The Office Action rejected claim 66 under 35 U.S.C. §103(a) as being unpatentably over Lebowitz, in view of U.S. Patent 6,067,030, to Burnett. For the reasons set forth below, Applicant respectfully traverses this rejection.

Independent claim 66 recites:

66. A transceiver that wirelessly communicates with a transmitter and telephonically communicates with a central location, the transceiver comprising:  
a wireless receiver ***configured to wirelessly receive a low-power signal, the low-power signal being wirelessly transmitted in close proximity to the receiver, the low-power signal comprising encoded information;***  
a telephonic transmitter configured to transmit a formatted electric signal over a telephone line, the telephone line comprising part of the public switched telephone network (PTSN); and  
***a controller comprising:***  
***a first portion, connected to the wireless receiver, configured to obtain the information encoded in the received low-power signal;***  
***a second portion, connected to the telephonic transmitter, configured to deliver the obtained information to the transmitter.***

(*Emphasis added.*) Applicant respectfully submits that claim 66 patently defines over the cited art for at least the reason that the cited prior art fails to disclose or otherwise teach the features emphasized above.

Independent claim 66 calls for a wireless receiver that is “configured to wirelessly receive a low-power signal, the low-power signal being wirelessly transmitted in close proximity to the receiver, the low-power signal comprising encoded information.” Applicant hereby repeats and re-alleges the argument set forth above with regard to the inapplicability of cellular transmission systems with the low-power wireless transmitter of the present invention. For at least this reason,

the rejection of claim 66 is misplaced, and should be withdrawn.

In addition, independent claim 66 calls for the low-power signal to comprise “encoded information.” The Office Action has not even alleged that such a teaching is disclosed in either Lebowitz or Burnett. Furthermore, independent claim 66 calls for a controller comprising “a first portion... configured to obtain the information encoded in the received low-power signal,” and “a second portion... configured to deliver the obtained information to the transmitter.” The Office Action has completely failed to identify any teachings within either Lebowitz or Burnett to teach, or allegedly teach, these defined portions of a controller. For at least these additional failings, the rejection of claim 66 should be withdrawn.

As a separate and independent basis for the patentability of claim 66, the Office Action failed to articulate an legally-satisfactory motivation to combine the Lebowitz and Burnett patents. In this regard, Applicant refers to the recent Federal Circuit decision of *In re Sang-Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Since this case was decided on January 18, 2002, *after the issuance of the presently-outstanding Office Action*, the Office Action could not have consider its holding when forming the rejections. As clearly articulated in this opinion (Tab B), general conclusions of obviousness will not be upheld, without clear evidentiary facts to support them. In this regard, Office Action rejections “cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies.” (Tab B, page 7). The *Sang-Su Lee* opinion further states that Office Actions “must make findings of facts, and present [their] reasoning in sufficient detail that [a] court may conduct meaningful review of the agency action.” (Tab B, page 7).

It is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art

that the claimed invention would have been obvious. W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc., 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

"The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ..." Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention."

(*Emphasis added.*) In re Dow Chemical Company, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicant notes that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest both the combination of elements and the structure resulting from the combination. Stiftung v. Renishaw PLC, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to create a system and method for communicating in a point to multi-point digital subscriber line (DSL) network as claimed by the Applicant.

"Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). "Even when the level of skill in the art is high, the [Office Action] must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the [Office Action] must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."



In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

"A showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding.'" Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed.Cir.2000)) (quoting C.R. Bard, Inc., v. M3 Systems, Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed.Cir.1998)); The Federal Circuit has made it clear "that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir.1999). Thus, there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant." In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed.Cir.1998).

In the present application, the Office Action has clearly failed to satisfy this evidentiary standard, which the Federal Circuit, in In re Sang-Su Lee (Tab B), held that the Administrative Procedures Act mandates. For example, in rejecting claim 66, the Office Action stated only:

... Therefore, it would have been obvious ... to incorporate the teaching of Burnett into that of Lebowitz thus making it possible to transmit an alarm signal via the internet to include pertinent information about the originating address.

This is the total of the argument and reasoning set forth by the Office Action in reaching the conclusion that one would have been led to combine the divergent teachings of Lebowitz and Burnett. Applicant respectfully submits that this falls far short of the legal requirement articulated by the Federal Circuit in In re Sung-Su Lee. For this reason alone, the rejections of the Office Action should be withdrawn. In addition, Applicant respectfully submits that, even combined, Lebowitz and Burnett fail to disclose all the elements of Applicants claims.

Moreover, the Office Action states that the combination would have been obvious “to ... make it possible to transmit ... via the *internet*...” However, most of Applicant’s are directed to the communication of information over a phone line of the PSTN, and NOT IP communications over the Internet. Clearly, the Office Action has misunderstood and misconstrued the claimed invention, and the rejection of claim 66 should be withdrawn.

***Dependent Claims 67-71***

Dependent claims 67-71 each depend from independent claim 66, and therefore patently define over the cited art for at least the reasons set out above in connection with claim 66.

***Independent Claim 72***

The Office Action rejected claim 72 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,343,493, to Karimullah. The Office Action also rejected claim 72 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,825,457, to Lebowitz. For the reasons set forth below, Applicant respectfully traverses this rejection.

Independent claim 72 recites:

72. A method for relaying an electronic message from a transmitter to a central location, the method comprising:  
wirelessly transmitting an information signal from the transmitter to a remotely located transceiver, ***the information signal comprising a unique message code, wherein the transmitter is in close proximity to the transceiver;***  
receiving the information by the remotely located transceiver;  
placing a telephone call from the transceiver to the central location, ***the central location being identified by a phone number contained within the information signal,*** over a phone line comprising part of a PTSN; and  
communicating the unique message code from the transceiver to the central location.

(*Emphasis added.*) Applicant respectfully submits that claim 72 patently defines over the cited art for at least the reason that the cited prior art fails to disclose or otherwise teach the features emphasized above.

Claim 72 calls for the transmitter to be “close proximity to the transceiver.” For the reasons discussed above, which are repeated and re-alleged herein, the cellular transmission systems of both the Karimullah patent and the Lebowitz patent fail to teach, disclose, or otherwise suggest this claim limitation, and therefore the rejection of claim 72 should be withdrawn. Indeed, the Office Action is not even alleged that this particular teaching is disclosed anywhere within the cited patents. Accordingly, the Office Action is legally deficient in this area and the rejections of claim 72 should be withdrawn.

In addition, claim 72 calls for an information signal having “a unique message code.” As taught within the specification of the present application, the message code is a relatively compact encoded portion of information, which may be decoded at a central location to define an action or status that is being conveyed through the message code. No such equivalent or corresponding teaching is even alleged to be found in either the Lebowitz or Karimullah patents. For at least this additional reason, the rejection set forth by the Office Action is deficient and should be withdrawn.

Further still, independent claim 72 calls for “the central location being identified by a phone number contained within the information signal.” Again, the Office Action completely fails to make any reference or cite to any teaching within the Karimullah patent or the Lebowitz patent, which allegedly disclose this element. For at least this additional reason, the Office Action rejection is deficient and should be withdrawn.

For at least the foregoing reasons, independent claim 72 patently defines over both the Karimullah and Lebowitz patents.

***Independent Claim 73***

The Office Action rejected claim 73 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,343,493, to Karimullah. The Office Action also rejected claim 73 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,825,457, to Lebowitz. For the reasons set forth below, Applicant respectfully traverses this rejection.

Independent claim 73 recites:

73. A transceiver comprising:  
***means for receiving a low-power electromagnetic signal, the electromagnetic signal including an encoded message code;***  
***means for transmitting a formatted electric signal over a phone line***  
comprising part of the public switched telephone network (PSTN); and  
***means for obtaining the message code from the electric signal and delivering the obtained code to the means for transmitting over the phone line to a predetermined destination.***

(*Emphasis added.*) Applicant respectfully submits that claim 73 patently defines over the cited art for at least the reason that the cited prior art fails to disclose or otherwise teach the features emphasized above.

As set forth above in connection with claim 55, the various emphasized elements of claim 73 are set forth in means-plus-function format. Accordingly, each of these elements must be construed in accordance with the structure, material, and acts disclosed in the present specification. The Office Action has failed to so construe these elements. In fact, the Office Action has construed the elements of claim 73 to be co-extensive with the claim elements of the other independent claims 33, 46, 55, and 72, insofar as the Office Action has set forth a summary rejection that is identical for each of these claims. This rejection reflects a fundamental error of

law on the part of the Office Action. For at least this reason, the rejection of claim 73 is improper and should be withdrawn.

As a separate and independent basis for the patentability of claim 73, Applicant respectfully submits that the various elements emphasized above are completely missing from the cited Karimullah and Lebowitz patents. For example, claim 73 calls for “means for receiving a low-power electromagnetic signal, the electromagnetic signal including an encoded message code.” As discussed above, the cellular transmission systems of Lebowitz and Karimullah do not equate to, and therefore do not anticipate, the low-power transmissions of the present invention. For at least this reason, the rejection of claim 73 is misplaced. In addition, claim 73 calls for the electromagnetic signal to include an “encoded message code.” The Office Action has completely failed to even allege that such a message code is contained within either the Lebowitz or Karimullah patents. For at least this additional reason, the rejection of claim 73 is misplaced and should be withdrawn.

In addition, claim 73 calls for “means for transmitting a formatted electric signal over a phone line.” This element includes a line interface circuit that couples the transceiver of the present application to a telephone line of the PSTN, such that information received at the transceiver may be coupled to and placed on the PSTN. No such equivalent or corresponding teaching has been cited by the Office Action in either the Karimullah or Lebowitz patents. For at least this additional reason, the rejection of claim 73 is misplaced and should be withdrawn.

Furthermore, claim 73 calls for “means for obtaining the message code from the electric signal and delivering the obtained code to the means for transmitting over the phone line to a predetermined destination.” Again, the Office Action has completely failed to identify the teaching within the Karimullah or Lebowitz patents that disclose this claim element. For at least

this additional reason, the rejection is misplaced, legally deficient, and should be withdrawn.

Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

CONCLUSION

Applicants respectfully submit that all claims are now in proper condition for allowance, and respectfully request that the Examiner pass this case to issuance. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

A check has been enclosed with the accompanying Petition for a Three-Month Extension of Time. No additional fee is believed to be due in connection with this response. If, however, any additional fees are required, you are hereby authorized to charge any and all such fees to Deposit Account No. 20-0778.

Respectfully submitted,



Daniel R. McClure  
Registration No. 38,962

**THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.**  
Suite 1750  
100 Galleria Parkway N.W.  
Atlanta, Georgia 30339  
(770) 933-9500

### **Annotated Version of the Amended Claims**

Claims of the present application have been amended as follows (where underlining denotes additions and brackets denote deletions):

33. (Once Amended) A system [of] for communicating information to a predetermined location, the system comprising:

a transmitter configured to wirelessly transmit a [low power] low-power signal comprising the information;

a transceiver, located remote from, but in close proximity to the transmitter [signal and communicate the information to the predetermined location], the transceiver comprising:

a line interface circuit configured to interface with a telephone line,  
wherein the telephone line is part of the public service telephone network (PTSN); and

a controller configured to receive the signal and communicate the information over the telephone line; and

a central location, located remotely from the transceiver, configured to communicate with the transceiver via the telephone line and receive the information.

46. (Once Amended) A method for communicating information to a predetermined location, the method comprising:

wirelessly transmitting an information signal from a transmitter to a remote transceiver, wherein the information signal is a [low power] low-power signal;

receiving the information signal by remote transceiver;

placing a telephone call from circuitry coupled to the transceiver to a central location via a phone line which comprises part of a public switched telephone network; communicating at least a portion of the information signal from the transceiver to the central location; and decoding at least a portion of the information signal by the central location.

55. (Once Amended) A system for communicating information to a central location, the system comprising:

means for wirelessly transmitting a [low powered] low-power signal comprising the information;

means for receiving the [low powered] low-power signal[; the receiving means], the means for receiving being remote but within close [proximate] proximity to the wireless transmitting means;

means for telephonically transmitting the information to the central location via a public service telephone network; and

means for receiving the information at the central location.

66. (Once Amended) A transceiver that wirelessly communicates with a transmitter and telephonically communicates with a central location, the transceiver comprising:

a wireless receiver configured to wirelessly receive a [low power] low-power signal, the [low power] low-power signal being wirelessly transmitted in close proximity to the receiver, the [low power] low-power signal comprising encoded information;



a telephonic transmitter configured to transmit a formatted electric signal over a telephone line, the telephone line comprising part of the public switched telephone network (PTSN); and

a controller comprising:

a first portion, connected to the wireless receiver, configured to obtain the information encoded in the received [low power] low-power signal;

a second portion, connected to the telephonic transmitter, configured to deliver the obtained information to the transmitter.

72. (Once Amended) A method [of] for relaying an electronic message from a transmitter to a central location, the method comprising:

wirelessly transmitting an information signal from the transmitter to a remotely located transceiver, the information signal comprising a unique message code, wherein the transmitter is in close proximity to the transceiver;

receiving the information by the remotely located transceiver;

placing a telephone call from the transceiver to the central location, the central location being identified by a [predetermined] phone number contained within the information signal, over a phone line comprising part of a PTSN; and

communicating the unique message code from the transceiver to the central [station] location.

73. (Once Amended) A transceiver comprising:

means for receiving a [low powered] low-power electromagnetic signal, the electromagnetic signal including an encoded message code;

means for transmitting a formatted electric signal over a phone line comprising part of the public switched telephone network (PSTN); and

means for obtaining the [instruction] message code from the [received] electric signal and delivering the obtained code to the means for transmitting [for transmitting] over the phone line to a predetermined destination.

United States Court of Appeals,  
Federal Circuit.

In re SANG-SU LEE.

No. 00-1158.

Jan. 18, 2002.

Board of Patent Appeals and Interferences rejected all claims of inventor's patent application directed toward method of automatically displaying functions of video display device that demonstrated how to select and adjust functions in order to facilitate response by user. Inventor appealed. The Court of Appeals, Pauline Newman, Circuit Judge, held that analysis by Board did not comport with either legal requirements for determination of obviousness or with requirements of Administrative Procedure Act (APA).

Vacated and remanded.

West Headnotes

**[1] Patents** 113(6)  
291k113(6)

Tribunals of the Patent and Trademark Office (PTO) are governed by the Administrative Procedure Act (APA), and their rulings receive the same judicial deference as do tribunals of other administrative agencies. 5 U.S.C.A. § 551 et seq.

**[2] Administrative Law and Procedure** 485  
15Ak485

**[2] Administrative Law and Procedure** 507  
15Ak507

For judicial review to be meaningfully achieved within the strictures of the Administrative Procedures Act (APA), an agency tribunal must present a full and reasoned explanation of its decision; the agency tribunal must set forth its findings and the grounds thereof, as supported by the agency record, and explain its application of the law to the found facts. 5 U.S.C.A. § 706(2).

**[3] Patents** 113(6)  
291k113(6)

Judicial review of a decision of the Board of Patent Appeals and Interferences denying an application for a patent is founded on the obligation of the agency to make the necessary findings and to provide an administrative record showing the evidence on which the findings are based, accompanied by the agency's reasoning in reaching its conclusions. 5 U.S.C.A. § 551 et seq.

**[4] Patents** 31.1  
291k31.1

As applied to the determination of patentability vel non when the issue is obviousness, it is fundamental that the rejection of a patent application must be based on evidence comprehended by the language of the statute addressing obviousness. 35 U.S.C.A. § 103.

**[5] Patents** 16.5(1)  
291k16.5(1)

The patent examination process centers on prior art and the analysis thereof; when patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. 35 U.S.C.A. § 103.

**[6] Patents** 26(1)  
291k26(1)

In the context of an obviousness determination by the Board of Patent Appeals and Interferences, the factual inquiry whether to combine references must be thorough and searching; it must be based on objective evidence of record. 35 U.S.C.A. § 103.

**[7] Patents** 111  
291k111

Analysis of invention by Board of Patent Appeals and Interferences did not comport with either legal requirements for determination of obviousness or with requirements of Administrative Procedure Act (APA) on basis that agency tribunal did not set forth findings and explanations needed for reasoned decisionmaking; examiner used conclusory statements to support his subjective belief that it was obvious that person skilled in the art would have been motivated to combine prior art, and Board rejected need for any specific hint or suggestion in particular

reference to support combination of prior art. 5 U.S.C.A. § 706(2); 35 U.S.C.A. § 103.

**[8] Patents** 26(1)  
291k26(1)

In an obviousness determination, the factual question of motivation to combine prior art is material to patentability, and cannot be resolved on subjective belief and unknown authority. 35 U.S.C.A. § 103.

**[9] Patents** 26(1)  
291k26(1)

**[9] Patents** 111  
291k111

In an obviousness determination under patent law, it is improper, in determining whether a person of ordinary skill would have been led to combine references, simply to use that which the inventor taught against its teacher; thus, the Board of Patent Appeals and Interferences must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. 5 U.S.C.A. § 706(2); 35 U.S.C.A. § 103.

**[10] Administrative Law and Procedure** 507  
15Ak507

Deferential judicial review under the Administrative Procedure Act (APA) does not relieve the agency of its obligation to develop an evidentiary basis for its findings; to the contrary, the APA reinforces this obligation. 5 U.S.C.A. § 706(2).

**[11] Administrative Law and Procedure** 763  
15Ak763

**[11] Administrative Law and Procedure** 796  
15Ak796

In the context of judicial review under the Administrative Procedure Act (APA), a decision by an agency tribunal that has an omission of a relevant factor required by precedent is both legal error and "arbitrary agency action." 5 U.S.C.A. § 551 et seq.

**[12] Administrative Law and Procedure** 485  
15Ak485

**[12] Administrative Law and Procedure** 760  
15Ak760

The foundation of the principle of judicial deference under the Administrative Procedures Act (APA) to the rulings of agency tribunals is that the tribunal has specialized knowledge and expertise, such that when reasoned findings are made, a reviewing court may confidently defer to the agency's application of its knowledge in its area of expertise; however, reasoned findings are critical to the performance of agency functions and judicial reliance on agency competence. 5 U.S.C.A. § 706(2).

**[13] Patents** 16(1)  
291k16(1)

The determination of patentability on the ground of unobviousness is ultimately one of judgment; in furtherance of the judgmental process, the patent examination procedure serves both to find, and to place on the official record, that which has been considered with respect to patentability. 35 U.S.C.A. § 103.

**[14] Patents** 16(3)  
291k16(3)

**[14] Patents** 104  
291k104

**[14] Patents** 111  
291k111

In the context of an obviousness determination, the patent examiner and the Board of Patent Appeals and Interferences are deemed to have experience in the field of the invention; however, this experience, insofar as applied to the determination of patentability, must be applied from the viewpoint of the person having ordinary skill in the art to which said subject matter pertains. 35 U.S.C.A. § 103.

**[15] Patents** 104  
291k104

In finding the relevant facts, in assessing the significance of the prior art, and in making the ultimate determination of the issue of obviousness, the examiner and the Board of Patent Appeals and Interferences are presumed to act from the viewpoint of a person having ordinary skill in the art to which the subject matter pertains; thus, when they rely on what they assert to be general knowledge to negate

patentability, that knowledge must be articulated and placed on the record and the failure to do so is not consistent with either effective administrative procedure or effective judicial review. 5 U.S.C.A. § 706(2); 35 U.S.C.A. § 103.

**[16] Patents** ⚡111  
291k111

In the context of an obviousness determination, the Board of Patent Appeals and Interferences cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies. 5 U.S.C.A. § 706(2); 35 U.S.C.A. § 103.

**[17] Administrative Law and Procedure** ⚡326  
15Ak326

**[17] Administrative Law and Procedure** ⚡485  
15Ak485

**[17] Administrative Law and Procedure** ⚡507  
15Ak507

Sound administrative procedure requires that an agency apply the law in accordance with statute and precedent; the agency tribunal must make findings of relevant facts, and present its reasoning in sufficient detail that the court may conduct meaningful review of the agency action. 5 U.S.C.A. § 706(2).

**Patents** ⚡328(2)  
291k328(2)

4,626,892. Cited As Prior Art.

\*1340 Richard H. Stern, of Washington, DC, argued for Sang Su Lee. With him on the brief was Robert E. Bushnell.

Sidney O. Johnson, Jr., Associate Solicitor, of Arlington, Virginia, argued for the Director of the U.S. Patent and Trademark Office. With him on the brief were John M. Whealan, Solicitor, and Raymond T. Chen, Associate Solicitor. Of counsel were Maximilian R. Peterson and Mark Nagumo, Associate Solicitors.

Before PAULINE NEWMAN, CLEVENGER, and DYK, Circuit Judges.

PAULINE NEWMAN, Circuit Judge.

Sang-Su Lee appeals the decision of the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office, rejecting all of the claims of Lee's patent application Serial No. 07/631,210 entitled "Self-Diagnosis and Sequential-Display Method of Every Function." [FN1] We vacate the Board's decision for failure to meet the adjudicative standards for review under the Administrative Procedure Act, and remand for further proceedings.

[FN1. *Ex parte Lee*, No.1994-1989 (Bd. Pat.App. & Int. Aug. 30, 1994; on reconsid'n Sept. 29, 1999).

**The Prosecution Record**

Mr. Lee's patent application is directed to a method of automatically displaying the functions of a video display device and demonstrating how to select and adjust the functions in order to facilitate response by the user. The display and demonstration are achieved using computer-managed electronics, including pulse-width modulation and auto-fine-tuning pulses, in accordance with procedures described in the specification. Claim 10 is representative:

10. A method for automatically displaying functions of a video display device, comprising: determining if a demonstration mode is selected; if said demonstration mode is selected, automatically entering a picture adjustment mode having a picture menu screen displaying a list of a plurality of picture functions; and automatically demonstrating selection and adjustment of individual ones of said plurality of picture functions.

The examiner rejected the claims on the ground of obviousness, citing the combination of two references: United States Patent No. 4,626,892 to Nortrup, and the Thunderchopper Helicopter Operations \*1341 Handbook for a video game. The Nortrup reference describes a television set having a menu display by which the user can adjust various picture and audio functions; however, the Nortrup display does not include a demonstration of how to adjust the functions. The Thunderchopper Handbook describes the Thunderchopper game's video display as having a "demonstration mode" showing how to play the game; however, the Thunderchopper Handbook makes no mention of the adjustment of picture or audio functions. The

examiner held that it would have been obvious to a person of ordinary skill to combine the teachings of these references to produce the Lee system.

Lee appealed to the Board, arguing that the Thunderchopper Handbook simply explained how to play the Thunderchopper game, and that the prior art provided no teaching or motivation or suggestion to combine this reference with Nortrup, or that such combination would produce the Lee invention. The Board held that it was not necessary to present a source of a teaching, suggestion, or motivation to combine these references or their teachings. The Board stated:

The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference.

Board op. at 7. The Board did not explain the "common knowledge and common sense" on which it relied for its conclusion that "the combined teachings of Nortrup and Thunderchopper would have suggested the claimed invention to those of ordinary skill in the art."

Lee filed a request for reconsideration, to which the Board responded after five years. The Board reaffirmed its decision, stating that the Thunderchopper Handbook was "analogous art" because it was "from the same field of endeavor" as the Lee invention, and that the field of video games was "reasonably pertinent" to the problem of adjusting display functions because the Thunderchopper Handbook showed video demonstrations of the "features" of the game. On the matter of motivation to combine the Nortrup and Thunderchopper references, the Board stated that "we maintain the position that we stated in our prior decision" and that the Examiner's Answer provided "a well reasoned discussion of why there is sufficient motivation to combine the references." The Board did not state the examiner's reasoning, and review of the Examiner's Answer reveals that the examiner merely stated that both the Nortrup function menu and the Thunderchopper demonstration mode are program features and that the Thunderchopper mode "is user-friendly" and it functions as a tutorial, and that it would have been obvious to combine them.

Lee had pressed the examiner during prosecution for some teaching, suggestion, or motivation in the prior art to select and combine the references that were relied on to show obviousness. The Examiner's Answer before the Board, plus a Supplemental Answer, stated that the combination of

Thunderchopper with Nortrup "would have been obvious to one of ordinary skill in the art since the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software," and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial." The Board adopted the examiner's answer, stating "the examiner has provided a well reasoned discussion of these references and how the combination of these references meets the claim limitations." However, perhaps recognizing that the examiner had provided insufficient justification to \*1342 support combining the Nortrup and Thunderchopper references, the Board held, as stated *supra*, that a "specific hint or suggestion" of motivation to combine was not required.

This appeal followed.

#### Judicial Review

[1] Tribunals of the PTO are governed by the Administrative Procedure Act, and their rulings receive the same judicial deference as do tribunals of other administrative agencies. *Dickinson v. Zurko*, 527 U.S. 150, 119 S.Ct. 1816, 144 L.Ed.2d 143, 50 USPQ2d 1930 (1999). Thus on appeal we review a PTO Board's findings and conclusions in accordance with the following criteria:

5 U.S.C. § 706(2) The reviewing court shall--

(2) hold unlawful and set aside agency actions, findings, and conclusions found to be--

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

\* \* \* \* \*

(E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute;

[2][3] For judicial review to be meaningfully achieved within these strictures, the agency tribunal must present a full and reasoned explanation of its decision. The agency tribunal must set forth its findings and the grounds thereof, as supported by the agency record, and explain its application of the law to the found facts. The Court has often explained:

The Administrative Procedure Act, which governs the proceedings of administrative agencies and related judicial review, establishes a scheme of "reasoned decisionmaking." Not only must an agency's decreed result be within the scope of its

lawful authority, but the process by which it reaches that result must be logical and rational. Allentown Mack Sales and Service, Inc. v. National Labor Relations Bd., 522 U.S. 359, 374, 118 S.Ct. 818, 139 L.Ed.2d 797 (1998) (citation omitted). This standard requires that the agency not only have reached a sound decision, but have articulated the reasons for that decision. The reviewing court is thus enabled to perform meaningful review within the strictures of the APA, for the court will have a basis on which to determine "whether the decision was based on the relevant factors and whether there has been a clear error of judgment." Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402, 416, 91 S.Ct. 814, 28 L.Ed.2d 136 (1971). Judicial review of a Board decision denying an application for patent is thus founded on the obligation of the agency to make the necessary findings and to provide an administrative record showing the evidence on which the findings are based, accompanied by the agency's reasoning in reaching its conclusions. See In re Zurko, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed.Cir.2001) (review is on the administrative record); In re Gartside, 203 F.3d 1305, 1314, 53 USPQ2d 1769, 1774 (Fed.Cir.2000) (Board decision "must be justified within the four corners of the record").

[4][5] As applied to the determination of patentability *vel non* when the issue is obviousness, "it is fundamental that rejections under 35 U.S.C. § 103 must be based on evidence comprehended by the language of that section." In re Grasselli, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed.Cir.1983). The essential factual evidence on the issue of obviousness is set forth in Graham v. John Deere Co., 383 U.S. 1, 17-18, 86 S.Ct. 684, 15 L.Ed.2d 545, 148 USPQ 459, 467 (1966) and extensive ensuing precedent. The patent examination \*1343 process centers on prior art and the analysis thereof. When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed.Cir.2001) ("the central question is whether there is reason to combine [the] references," a question of fact drawing on the Graham factors).

[6] "The factual inquiry whether to combine references must be thorough and searching." *Id.* It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions,

and cannot be dispensed with. See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed.Cir.2000) ("a showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding' ") (quoting C.R. Bard, Inc. v. M3 Systems, Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed.Cir.1998)); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir.1999) ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed.Cir.1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed.Cir.1988) (" 'teachings of references can be combined *only* if there is some suggestion or incentive to do so.' ") (emphasis in original) (quoting ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed.Cir.1984)).

The need for specificity pervades this authority. See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed.Cir.2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed"); In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed.Cir.1998) ("even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."); In re Fritch, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed.Cir.1992) (the examiner can satisfy the burden of showing obviousness of the combination "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references").

[7][8][9] With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that

which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question \*1344 of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed.Cir.1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.

[10] Deferential judicial review under the Administrative Procedure Act does not relieve the agency of its obligation to develop an evidentiary basis for its findings. To the contrary, the Administrative Procedure Act reinforces this obligation. See, e.g., Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Ins. Co., 463 U.S. 29, 43, 103 S.Ct. 2856, 77 L.Ed.2d 443 (1983) ("the agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.' ") (quoting Burlington Truck Lines v. United States, 371 U.S. 156, 168, 83 S.Ct. 239, 9 L.Ed.2d 207 (1962)); Securities & Exchange Comm'n v. Chenery Corp., 318 U.S. 80, 94, 63 S.Ct. 454, 87 L.Ed. 626 (1943) ("The orderly function of the process of review requires that the grounds upon which the administrative agency acted are clearly disclosed and adequately sustained.").

[11] In its decision on Lee's patent application, the Board rejected the need for "any specific hint or suggestion in a particular reference" to support the combination of the Nortrup and Thunderchopper references. Omission of a relevant factor required by precedent is both legal error and arbitrary agency action. See Motor Vehicle Manufacturers, 463 U.S. at 43, 103 S.Ct. 2856 ("an agency rule would be arbitrary and capricious if the agency ... entirely failed to consider an important aspect of the problem"); Mullins v. Department of Energy, 50 F.3d 990, 992 (Fed.Cir.1995) ("It is well established that

agencies have a duty to provide reviewing courts with a sufficient explanation for their decisions so that those decisions may be judged against the relevant statutory standards, and that failure to provide such an explanation is grounds for striking down the action."). As discussed in National Labor Relations Bd. v. Ashkenazy Property Mgt. Corp., 817 F.2d 74, 75 (9th Cir.1987), an agency is "not free to refuse to follow circuit precedent."

[12] The foundation of the principle of judicial deference to the rulings of agency tribunals is that the tribunal has specialized knowledge and expertise, such that when reasoned findings are made, a reviewing court may confidently defer to the agency's application of its knowledge in its area of expertise. Reasoned findings are critical to the performance of agency functions and judicial reliance on agency competence. See Baltimore and Ohio R.R. Co. v. Aberdeen & Rockfish R.R. Co., 393 U.S. 87, 91-92, 89 S.Ct. 280, 21 L.Ed.2d 219 (1968) (absent reasoned findings based on substantial evidence effective review would become lost "in the haze of so-called expertise"). The "common knowledge and common sense" on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation. This court explained in Zurko, 258 F.3d at 1385, 59 USPQ2d at 1697, that "deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.' " The \*1345 Board's findings must extend to all material facts and must be documented on the record, lest the "haze of so-called expertise" acquire insulation from accountability. "Common knowledge and common sense," even if assumed to derive from the agency's expertise, do not substitute for authority when the law requires authority. See Allentown Mack, 522 U.S. at 376, 118 S.Ct. 818 ("Because reasoned decisionmaking demands it, and because the systemic consequences of any other approach are unacceptable, the Board must be required to apply in fact the clearly understood legal standards that it enunciates in principle....")

The case on which the Board relies for its departure from precedent, In re Bozek, 57 C.C.P.A. 713, 416 F.2d 1385, 163 USPQ 545 (1969), indeed mentions "common knowledge and common sense," the CCPA stating that the phrase was used by the Solicitor to support the Board's conclusion of obviousness based on evidence in the prior art. Bozek did not hold that common knowledge and common sense are a



substitute for evidence, but only that they may be applied to analysis of the evidence. *Bozek* did not hold that objective analysis, proper authority, and reasoned findings can be omitted from Board decisions. Nor does *Bozek*, after thirty-two years of isolation, outweigh the dozens of rulings of the Federal Circuit and the Court of Customs and Patent Appeals that determination of patentability must be based on evidence. This court has remarked, in *Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1421 (Fed.Cir.1999), that *Bozek*'s reference to common knowledge "does not in and of itself make it so" absent evidence of such knowledge.

[13][14][15][16] The determination of patentability on the ground of unobviousness is ultimately one of judgment. In furtherance of the judgmental process, the patent examination procedure serves both to find, and to place on the official record, that which has been considered with respect to patentability. The patent examiner and the Board are deemed to have experience in the field of the invention; however, this experience, insofar as applied to the determination of patentability, must be applied from the viewpoint of "the person having ordinary skill in the art to which said subject matter pertains," the words of section 103. In finding the relevant facts, in assessing the significance of the prior art, and in making the ultimate determination of the issue of obviousness, the examiner and the Board are presumed to act from this viewpoint. Thus when they rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record. The failure to do so is not consistent with either effective administrative procedure or effective judicial review. The board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies.

#### *Alternative Grounds*

At oral argument the PTO Solicitor proposed alternative grounds on which this court might affirm the Board's decision. However, as stated in *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168, 83 S.Ct. 239, 9 L.Ed.2d 207 (1962), "courts may not accept appellate counsel's *post hoc* rationalization for agency action." Consideration by the appellate tribunal of new agency justifications deprives the aggrieved party of a fair opportunity to support its position; thus review of an administrative decision must be made on the grounds relied on by

the agency. "If those grounds are inadequate or improper, the court is powerless to affirm the administrative action by substituting what it considers \*1346 to be a more adequate or proper basis." *Securities & Exchange Comm'n v. Chenery Corp.*, 332 U.S. 194, 196, 67 S.Ct. 1575, 91 L.Ed. 1995 (1947). As reiterated in *Federal Election Comm'n v. Akins*, 524 U.S. 11, 25, 118 S.Ct. 1777, 141 L.Ed.2d 10 (1998), "If a reviewing court agrees that the agency misinterpreted the law, it will set aside the agency's action and remand the case—even though the agency (like a new jury after a mistrial) might later, in the exercise of its lawful discretion, reach the same result for a different reason." Thus we decline to consider alternative grounds that might support the Board's decision.

#### *Further Proceedings*

[17] Sound administrative procedure requires that the agency apply the law in accordance with statute and precedent. The agency tribunal must make findings of relevant facts, and present its reasoning in sufficient detail that the court may conduct meaningful review of the agency action. In *Radio-Television News Directors Ass'n v. FCC*, 184 F.3d 872 (D.C.Cir.1999) the court discussed the "fine line between agency reasoning that is 'so crippled as to be unlawful' and action that is potentially lawful but insufficiently or inappropriately explained," quoting from *Checkosky v. Securities & Exch. Comm'n*, 23 F.3d 452, 464 (D.C.Cir.1994); the court explained that "[i]n the former circumstance, the court's practice is to vacate the agency's order, while in the latter the court frequently remands for further explanation (including discussion of the relevant factors and precedents) while withholding judgment on the lawfulness of the agency's proposed action." *Id.* at 888. In this case the Board's analysis of the Lee invention does not comport with either the legal requirements for determination of obviousness or with the requirements of the Administrative Procedure Act that the agency tribunal set forth the findings and explanations needed for "reasoned decisionmaking." Remand for these purposes is required. See *Overton Park*, 401 U.S. at 420- 421, 91 S.Ct. 814 (remanding for further proceedings appropriate to the administrative process).

VACATED AND REMANDED.

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